



A-570B edited 020703.ST25.txt
SEQUENCE LISTING

<110> BOYLE, WILLIAM J.
HSU, HAILING
<120> RECEPTOR FROM TNF FAMILY
<130> A-570B
<140> 09/779,050
<141> 2001-02-12
<150> 60/181,800
<151> 2000-02-11
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<170> PatentIn version 3.1
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<213> Homo sapiens
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<222> (143)..(997)
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ccttcaaagt tcaagtagtg at atg gat gac tcc aca gaa agg gag cag tca 172
Met Asp Asp Ser Thr Glu Arg Glu Gln Ser
1 5 10
cgc ctt act tct tgc ctt aag aaa aga gaa gaa atg aaa ctg aag gag 220
Arg Leu Thr Ser Cys Leu Lys Lys Arg Glu Glu Met Lys Leu Lys Glu
15 20 25
tgt gtt tcc atc ctc cca cgg aag gaa agc ccc tct gtc cga tcc tcc 268
Cys Val Ser Ile Leu Pro Arg Lys Glu Ser Pro Ser Val Arg Ser Ser
30 35 40
aaa gac gga aag ctg ctg gct gca acc ttg ctg ctg gca ctg ctg tct 316
Lys Asp Gly Lys Leu Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser
45 50 55
tgc tgc ctc acg gtg gtg tct ttc tac cag gtg gcc gcc ctg caa ggg 364
Cys Cys Leu Thr Val Val Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly
60 65 70
gac ctg gcc agc ctc cgg gca gag ctg cag gcc cac cac gcg gag aag 412
Asp Leu Ala Ser Leu Arg Ala Glu Leu Gln Gly His His Ala Glu Lys
75 80 85 90
ctg cca gca gga gca gga gcc ccc aag gcc gcc ctg gag gaa gct cca 460
Leu Pro Ala Gly Ala Gly Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro
95 100 105
gct gtc acc gcg gga ctg aaa atc ttt gaa cca cca gct cca gga gaa 508

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Ala Val Thr Ala Gly Leu Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu
110 115 120

ggc aac tcc agt cag aac agc aga aat aag cgt gcc gtt cag ggt cca 556
Gly Asn Ser Ser Gln Asn Ser Arg Asn Lys Arg Ala Val Gln Gly Pro
125 130 135

gaa gaa aca gtc act caa gac tgc ttg caa ctg att gca gac agt gaa 604
Glu Glu Thr Val Thr Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu
140 145 150

aca cca act ata caa aaa gga tct tac aca ttt gtt cca tgg ctt ctc 652
Thr Pro Thr Ile Gln Lys Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu
155 160 165 170

agc ttt aaa agg gga agt gcc cta gaa gaa aaa gag aat aaa ata ttg 700
Ser Phe Lys Arg Gly Ser Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu
175 180 185

gtc aaa gaa act ggt tac ttt ttt ata tat ggt cag gtt tta tat act 748
Val Lys Glu Thr Gly Tyr Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr
190 195 200

gat aag acc tac gcc atg gga cat cta att cag agg aag aag gtc cat 796
Asp Lys Thr Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His
205 210 215

gtc ttt ggg gat gaa ttg agt ctg gtg act ttg ttt cga tgt att caa 844
Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln
220 225 230

aat atg cct gaa aca cta ccc aat aat tcc tgc tat tca gct ggc att 892
Asn Met Pro Glu Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile
235 240 245 250

gca aaa ctg gaa gaa gga gat gaa ctc caa ctt gca ata cca aga gaa 940
Ala Lys Leu Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu
255 260 265

aat gca caa ata tca ctg gat gga gat gtc aca ttt ttt ggt gca ttg 988
Asn Ala Gln Ile Ser Leu Asp Gly Asp Val Thr Phe Phe Gly Ala Leu
270 275 280

aaa ctg ctg tgacctactt acaccatgtc tgtagctatt ttcctccctt 1037
Lys Leu Leu 285

tctctgtacc tctaagaaga aagaatctaa ctgaaaatac caaaaaaaaa aaaaaaaaaa 1097

aaaaaaaaagt agttaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1157

aaaaactcgg aggggg 1173

<210> 2
<211> 285
<212> PRT
<213> Homo sapiens

<400> 2

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 Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu
 35 40 45
 Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Cys Cys Leu Thr Val Val
 50 55 60
 Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
 65 70 75 80
 Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly
 85 90 95
 Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu
 100 105 110
 Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn
 115 120 125
 Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln
 130 135 140
 Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys
 145 150 155 160
 Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser
 165 170 175
 Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr
 180 185 190
 Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met
 195 200 205
 Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu
 210 215 220
 Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu
 225 230 235 240
 Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly
 245 250 255
 Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu
 Page 3

09

260

265

270

Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
 275 280 285

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 <212> DNA
 <213> Mus musculus

<220>
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 <222> (52)..(978)
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 Glu Ser Ala Lys Thr Leu Pro Pro Pro Cys Leu Cys Phe Cys Ser Glu
 5 10 15

aaa gga gaa gat atg aaa gtg gga tat gat ccc atc act ccg cag aag 153
 Lys Gly Glu Asp Met Lys Val Gly Tyr Asp Pro Ile Thr Pro Gln Lys
 20 25 30

gag gag ggt gcc tgg ttt ggg atc tgc agg gat gga agg ctg ctg gct 201
 Glu Glu Gly Ala Trp Phe Gly Ile Cys Arg Asp Gly Arg Leu Leu Ala
 35 40 45 50

gct acc ctc ctg ctg gcc ctg ttg tcc agc agt ttc aca gcg atg tcc 249
 Ala Thr Leu Leu Leu Ala Leu Leu Ser Ser Ser Phe Thr Ala Met Ser
 55 60 65

ttg tac cag ttg gct gcc ttg caa gca gac ctg atg aac ctg cgc atg 297
 Leu Tyr Gln Leu Ala Ala Leu Gln Ala Asp Leu Met Asn Leu Arg Met
 70 75 80

gag ctg cag agc tac cga ggt tca gca aca cca gcc gcc gcg ggt gct 345
 Glu Leu Gln Ser Tyr Arg Gly Ser Ala Thr Pro Ala Ala Ala Gly Ala
 85 90 95

cca gag ttg acc gct gga gtc aaa ctc ctg aca ccg gca gct cct cga 393
 Pro Glu Leu Thr Ala Gly Val Lys Leu Leu Thr Pro Ala Ala Pro Arg
 100 105 110

ccc cac aac tcc agc cgc ggc cac agg aac aga cgc gct ttc cag gga 441
 Pro His Asn Ser Ser Arg Gly His Arg Asn Arg Arg Ala Phe Gln Gly
 115 120 125 130

cca gag gaa aca gaa caa gat gta gac ctc tca gct cct cct gca cca 489
 Pro Glu Glu Thr Glu Gln Asp Val Asp Leu Ser Ala Pro Pro Ala Pro
 135 140 145

tgc ctg cct gga tgc cgc cat tct caa cat gat gat aat gga atg aac 537
 Cys Leu Pro Gly Cys Arg His Ser Gln His Asp Asp Asn Gly Met Asn
 150 155 160

ctc aga aac atc att caa gac tgt ctg cag ctg att gca gac agc gac 585

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Leu Arg Asn Ile Ile Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Asp
165 170 175

acg ccg act ata cga aaa gga act tac aca ttt gtt cca tgg ctt ctc 633
Thr Pro Thr Ile Arg Lys Gly Thr Tyr Thr Phe Val Pro Trp Leu Leu
180 185 190

agc ttt aaa aga gga aat gcc ttg gag gag aaa gag aac aaa ata gtg 681
Ser Phe Lys Arg Gly Asn Ala Leu Glu Glu Lys Glu Asn Lys Ile Val
195 200 205 210

gtg agg caa aca ggc tat ttc ttc atc tac agc cag gtt cta tac acg 729
Val Arg Gln Thr Gly Tyr Phe Phe Ile Tyr Ser Gln Val Leu Tyr Thr
215 220 225

gac ccc atc ttt gct atg ggt cat gtc atc cag agg aag aaa gta cac 777
Asp Pro Ile Phe Ala Met Gly His Val Ile Gln Arg Lys Lys Val His
230 235 240

gtc ttt ggg gac gag ctg agc ctg gtg acc ctg ttc cga tgt att cag 825
Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln
245 250 255

aat atg ccc aaa aca ctg ccc aac aat tcc tgc tac ttg gct ggc atc 873
Asn Met Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Leu Ala Gly Ile
260 265 270

gcg agg ctg gaa gaa gga gat gag att cag ctt gca att cct cgg gag 921
Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro Arg Glu
275 280 285

aat gca cag att tca cgc aac gga gac gac acc ttc ttt ggt gcc cta 969
Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly Ala Leu
295 300 305

aaa ctg ctg taactcactt gctggagtgc gtgatccctt tccctcgtct 1018
Lys Leu Leu

tctctgtacc tccgagggag aaacagacga ctggaaaaat aaaagatggg gaaagccgtc 1078

agcgaaagtt ttctcgtgac ccgttgaatc tgatccaaac caggaaatat aacagacagc 1138

c 1139

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<212> PRT
<213> Mus musculus

<400> 4

Met Asp Glu Ser Ala Lys Thr Leu Pro Pro Pro Cys Leu Cys Phe Cys
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20 25 30

Gln Lys Glu Glu Gly Ala Trp Phe Gly Ile Cys Arg Asp Gly Arg Leu
35 40 45

Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Ser Ser Phe Thr Ala
 50 55 60
 Met Ser Leu Tyr Gln Leu Ala Ala Leu Gln Ala Asp Leu Met Asn Leu
 65 70 75 80
 Arg Met Glu Leu Gln Ser Tyr Arg Gly Ser Ala Thr Pro Ala Ala Ala
 85 90 95
 Gly Ala Pro Glu Leu Thr Ala Gly Val Lys Leu Leu Thr Pro Ala Ala
 100 105 110
 Pro Arg Pro His Asn Ser Ser Arg Gly His Arg Asn Arg Arg Ala Phe
 115 120 125
 Gln Gly Pro Glu Glu Thr Glu Gln Asp Val Asp Leu Ser Ala Pro Pro
 130 135 140
 Ala Pro Cys Leu Pro Gly Cys Arg His Ser Gln His Asp Asp Asn Gly
 145 150 155 160
 Met Asn Leu Arg Asn Ile Ile Gln Asp Cys Leu Gln Leu Ile Ala Asp
 165 170 175
 Ser Asp Thr Pro Thr Ile Arg Lys Gly Thr Tyr Thr Phe Val Pro Trp
 180 185 190
 Leu Leu Ser Phe Lys Arg Gly Asn Ala Leu Glu Glu Lys Glu Asn Lys
 195 200 205
 Ile Val Val Arg Gln Thr Gly Tyr Phe Phe Ile Tyr Ser Gln Val Leu
 210 215 220
 Tyr Thr Asp Pro Ile Phe Ala Met Gly His Val Ile Gln Arg Lys Lys
 225 230 235 240
 Val His Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys
 245 250 255
 Ile Gln Asn Met Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Leu Ala
 260 265 270
 Gly Ile Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro
 275 280 285
 Arg Glu Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly
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Q9

290

295

300

Ala Leu Lys Leu Leu
305

<210> 5
<211> 278
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
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30, 31, 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 47, 50, 51, 52, 54, 55, 57,
60, 78, 79, 86, 87, 88, 89, 90, 91, 92, 95, 100, 101, 105, 107, 108, 109, 111, 114,
115, 116, 120, 121, 122, 125, 128, 135, 136, 147, 152, 155, 179, 181, 182, 190, 197,
198, 199, 204, 231, 245, 252, 265, 266,)..(269)
<223> X = any naturally occurring amino acid residue

<400> 5

Met Asp Xaa Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Cys
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Xaa Xaa Lys Xaa Glu Xaa Met Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30

Xaa Xaa Xaa Glu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Gly Xaa Leu
35 40 45

Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Xaa Xaa Xaa Thr Xaa
50 55 60

Xaa Ser Xaa Tyr Gln Xaa Ala Ala Leu Gln Xaa Asp Leu Xaa Xaa Leu
65 70 75 80

Arg Xaa Glu Leu Gln Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ala Xaa Ala
85 90 95

Gly Ala Pro Xaa Xaa Thr Ala Gly Xaa Lys Xaa Xaa Xaa Pro Xaa Ala
100 105 110

Pro Xaa Xaa Xaa Asn Ser Ser Xaa Xaa Xaa Arg Asn Xaa Arg Ala Xaa
115 120 125

Gln Gly Pro Glu Glu Thr Xaa Xaa Gln Asp Cys Leu Gln Leu Ile Ala
130 135 140

Asp Ser Xaa Thr Pro Thr Ile Xaa Lys Gly Xaa Tyr Thr Phe Val Pro
145 150 155 160

Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala Leu Glu Glu Lys Glu Asn
165 170 175

Lys Ile Xaa Val Xaa Xaa Thr Gly Tyr Phe Phe Ile Tyr Xaa Gln Val
180 185 190

Leu Tyr Thr Asp Xaa Xaa Xaa Ala Met Gly His Xaa Ile Gln Arg Lys
195 200 205

Lys Val His Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg
210 215 220

Cys Ile Gln Asn Met Pro Xaa Thr Leu Pro Asn Asn Ser Cys Tyr Ser
225 230 235 240

Ala Gly Ile Ala Xaa Leu Glu Glu Gly Asp Glu Xaa Gln Leu Ala Ile
245 250 255

Pro Arg Glu Asn Ala Gln Ile Ser Xaa Xaa Gly Asp Xaa Thr Phe Phe
260 265 270

Gly Ala Leu Lys Leu Leu
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<210> 6

<211> 102

<212> PRT

<213> Consensus

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<223> X = any naturally occurring amino acid residue

<400> 6

Xaa Pro Ala Ala His Leu Thr Xaa Pro Xaa Leu Xaa Trp Ala Xaa Leu
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Ser Xaa Gly Val Xaa Leu Xaa Asn Xaa Leu Val Val Xaa Gly Leu Tyr
20 25 30

Phe Ile Tyr Ser Gln Val Xaa Phe Xaa Gly Gln Xaa Cys Pro Xaa Val
35 40 45

Xaa Leu Xaa His Xaa Val Xaa Val Xaa Tyr Pro Xaa Leu Leu Ser Xaa
50 55 60

Thr Xaa Cys Xaa Trp Xaa Ser Xaa Tyr Leu Gly Gly Val Phe Xaa Leu
65 70 75 80

Xaa Gly Asp Xaa Leu Tyr Val Asn Val Xaa Ser Xaa Phe Xaa Thr Phe
85 90 95

Phe Gly Leu Phe Lys Leu
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<210> 7
<211> 143
<212> PRT
<213> Homo sapiens
<400> 7

Glu Lys Lys Glu Leu Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn
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Ser Arg Ser Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu
20 25 30

Leu Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Leu Asn Glu Thr
35 40 45

Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys
50 55 60

Asn Asn Leu Pro Leu Ser His Lys Val Tyr Met Arg Asn Ser Lys Tyr
65 70 75 80

Pro Gln Asp Leu Val Met Met Glu Gly Lys Met Met Ser Tyr Cys Thr
85 90 95

Thr Gly Gln Met Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn
100 105 110

Leu Thr Ser Ala Asp His Leu Tyr Val Asn Val Ser Glu Leu Ser Leu
115 120 125

Val Asn Phe Glu Glu Ser Gln Thr Phe Phe Gly Leu Tyr Lys Leu
130 135 140

<210> 8
<211> 143
<212> PRT
<213> Mus musculus
<400> 8

Glu Lys Lys Glu Pro Arg Ser Val Ala His Leu Thr Gly Asn Pro His

1 5 10 15
 Ser Arg Ser Ile Pro Leu Glu Trp Glu Asp Thr Tyr Gly Thr Ala Leu
 20 25 30
 Ile Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn Glu Thr
 35 40 45
 Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys
 50 55 60
 Asn Asn Gln Pro Ile Asn His Lys Val Tyr Met Arg Asn Ser Lys Tyr
 65 70 75 80
 Pro Glu Asp Leu Val Leu Met Glu Glu Lys Arg Leu Asn Tyr Cys Thr
 85 90 95
 Thr Gly Gln Ile Trp Ala His Ser Ser Tyr Leu Gly Ala Val Phe Asn
 100 105 110
 Leu Thr Ser Ala Asp His Leu Val Tyr Asn Ile Ser Gln Leu Ser Leu
 115 120 125
 29 Ile Asn Phe Glu Glu Ser Lys Thr Phe Phe Gly Leu Tyr Lys Leu
 130 135 140

<210> 9
 <211> 143
 <212> PRT
 <213> Rattus rattus

<400> 9

Glu Thr Lys Lys Pro Arg Ser Val Ala His Leu Thr Gly Asn Pro Arg
 1 5 10 15
 Ser Arg Ser Ile Pro Leu Glu Trp Glu Asp Thr Tyr Gly Thr Ala Leu
 20 25 30
 Ile Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn Glu Ala
 35 40 45
 Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys
 50 55 60
 Asn Ser Gln Pro Leu Ser His Lys Val Tyr Met Arg Asn Phe Lys Tyr
 65 70 75 80
 Pro Gly Asp Leu Val Leu Met Glu Glu Lys Lys Leu Asn Tyr Cys Thr
 85 90 95

85

90

95

Thr Gly Gln Ile Trp Ala His Ser Ser Tyr Leu Gly Ala Val Phe Asn
 100 105 110

Leu Thr Val Ala Asp His Leu Tyr Val Asn Ile Ser Gln Leu Ser Leu
 115 120 125

Ile Asn Phe Glu Glu Ser Lys Thr Phe Phe Gly Leu Tyr Lys Leu
 130 135 140

<210> 10
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 10

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Ser Lys Thr Thr Ser Val Leu Gln Trp Ala Glu Lys Gly Tyr Tyr Thr
 20 25 30

Met Ser Asn Asn Leu Val Thr Leu Glu Asn Gly Lys Gln Leu Thr Val
 35 40 45

Lys Arg Gln Gly Leu Tyr Tyr Ile Tyr Ala Gln Val Thr Phe Cys Ser
 50 55 60

Asn Arg Glu Ala Ser Ser Gln Ala Pro Phe Ile Ala Ser Leu Cys Leu
 65 70 75 80

Lys Ser Pro Gly Arg Phe Glu Arg Ile Leu Leu Arg Ala Ala Asn Thr
 85 90 95

His Ser Ser Ala Lys Pro Cys Gly Gln Gln Ser Ile His Leu Gly Gly
 100 105 110

Val Phe Glu Leu Gln Pro Gly Ala Ser Val Phe Val Asn Val Thr Asp
 115 120 125

Pro Ser Gln Val Ser His Gly Thr Gly Phe Thr Ser Phe Gly Leu Leu
 130 135 140

Lys Leu
 145

<210> 11

<211> 146
 <212> PRT
 <213> Mus musculus

<400> 11

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 1 5 10 15

Ser Asn Ala Ala Ser Val Leu Gln Trp Ala Lys Lys Gly Tyr Tyr Thr
 20 25 30

Met Lys Ser Asn Leu Val Met Leu Glu Asn Gly Lys Gln Leu Thr Val
 35 40 45

Lys Arg Glu Gly Leu Tyr Tyr Val Tyr Thr Gln Val Thr Phe Gln Ser
 50 55 60

Asn Arg Glu Pro Ser Ser Gln Arg Pro Phe Ile Val Gly Leu Trp Leu
 65 70 75 80

Lys Pro Ser Ile Gly Ser Glu Arg Ile Leu Leu Lys Ala Ala Asn Thr
 85 90 95

His Ser Ser Ser Gln Leu Cys Glu Gln Gln Ser Val His Leu Gly Gly
 100 105 110

Val Phe Glu Leu Gln Ala Gly Ala Ser Val Phe Val Asn Val Thr Glu
 115 120 125

Ala Ser Gln Val Ile His Arg Val Gly Phe Ser Ser Phe Gly Leu Leu
 130 135 140

Lys Leu
 145

<210> 12
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 12

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 20 25 30

Arg Gly Ser Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu
 35 40 45

Thr Gly Tyr Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr
50 55 60

Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly
65 70 75 80

Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro
85 90 95

Glu Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu
100 105 110

Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln
115 120 125

Ile Ser Leu Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
130 135 140

<210> 13
<211> 147
<212> PRT
<213> Mus musculus

<400> 13

Leu Arg Asn Ile Ile Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Asp
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Thr Pro Thr Ile Arg Lys Gly Thr Tyr Thr Phe Val Pro Trp Leu Leu
20 25 30

Ser Phe Lys Arg Gly Asn Ala Leu Glu Glu Lys Glu Asn Lys Ile Val
35 40 45

Val Arg Gln Thr Gly Tyr Phe Phe Ile Tyr Ser Gln Val Leu Tyr Thr
50 55 60

Asp Pro Ile Phe Ala Met Gly His Val Ile Gln Arg Lys Lys Val His
65 70 75 80

Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln
85 90 95

Asn Met Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile
100 105 110

Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro Arg Glu
115 120 125

Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly Ala Leu
130 135 140

Lys Leu Leu
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<210> 14
<211> 160
<212> PRT
<213> Mus musculus

<400> 14

Gly Lys Pro Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Ala
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Ser Ile Pro Ser Gly Ser His Lys Val Thr Leu Ser Ser Trp Tyr His
20 25 30

Asp Arg Gly Trp Ala Lys Ile Ser Asn Met Thr Leu Ser Asn Gly Lys
35 40 45

Leu Arg Val Asn Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys
50 55 60

Phe Arg His His Glu Thr Ser Gly Ser Val Pro Thr Asp Tyr Leu Gln
65 70 75 80

Leu Met Val Tyr Val Val Lys Thr Ser Ile Lys Ile Pro Ser Ser His
85 90 95

Asn Leu Met Lys Gly Gly Ser Thr Lys Asn Trp Ser Gly Asn Ser Glu
100 105 110

Phe His Phe Tyr Ser Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ala
115 120 125

Gly Glu Glu Ile Ser Ile Gln Val Ser Asn Pro Ser Leu Leu Asp Pro
130 135 140

Asp Gln Asp Ala Thr Tyr Phe Gly Ala Phe Lys Val Gln Asp Ile Asp
145 150 155 160

<210> 15
<211> 160
<212> PRT
<213> Homo sapiens

<400> 15

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Ser Lys Leu Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Thr
1 5 10 15

Asp Ile Pro Ser Gly Ser His Lys Val Ser Leu Ser Ser Trp Tyr His
20 25 30

Asp Arg Gly Trp Ala Lys Ile Ser Asn Met Thr Phe Ser Asn Gly Lys
35 40 45

Leu Ile Val Asn Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys
50 55 60

Phe Arg His His Glu Thr Ser Gly Asp Leu Ala Thr Glu Tyr Leu Gln
65 70 75 80

Leu Met Val Tyr Val Thr Lys Thr Ser Ile Lys Ile Pro Ser Ser His
85 90 95

Thr Leu Met Lys Gly Gly Ser Thr Lys Tyr Trp Ser Gly Asn Ser Glu
100 105 110

Phe His Phe Tyr Ser Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ser
115 120 125

Gly Glu Glu Ile Ser Ile Glu Val Ser Asn Pro Ser Leu Leu Asp Pro
130 135 140

Asp Gln Asp Ala Thr Tyr Phe Gly Ala Phe Lys Val Arg Asp Ile Asp
145 150 155 160

<210> 16
<211> 166
<212> PRT
<213> Homo sapiens

<400> 16

Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly Thr Arg Gly
1 5 10 15

Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu Lys Ala Leu
20 25 30

Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly His Ser Phe
35 40 45

Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile His Glu Lys
50 55 60

Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln Glu Glu
65 70 75 80

Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln Tyr Ile Tyr
85 90 95

Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys Ser Ala Arg
100 105 110

Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr Ser Ile Tyr
115 120 125

Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile Phe Val Ser
130 135 140

Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala Ser Phe Phe
145 150 155 160

Gly Ala Phe Leu Val Gly
165

09

<210> 17
<211> 172
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<213> Mus musculus

<400> 17

Gly Gly Arg Pro Gln Lys Val Ala Ala His Ile Thr Gly Ile Thr Arg
1 5 10 15

Arg Ser Asn Ser Ala Leu Ile Pro Ile Ser Lys Asp Gly Lys Thr Leu
20 25 30

Gly Gln Lys Ile Glu Ser Trp Glu Ser Ser Arg Lys Gly His Ser Phe
35 40 45

Leu Asn His Val Leu Phe Arg Asn Gly Glu Leu Val Ile Glu Gln Glu
50 55 60

Gly Leu Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln Glu Ala
65 70 75 80

Glu Asp Ala Ser Lys Met Val Ser Lys Asp Lys Val Arg Thr Lys Gln
85 90 95

Leu Val Gln Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Val
100 105 110

Leu Met Lys Ser Ala Arg Asn Ser Cys Trp Ser Arg Asp Ala Glu Tyr
115 120 125

Gly Leu Tyr Ser Ile Tyr Gln Gly Gly Leu Phe Glu Leu Lys Lys Asn
130 135 140

Asp Arg Ile Phe Val Ser Val Thr Asn Glu His Leu Met Asp Leu Asp
145 150 155 160

Gln Glu Ala Ser Phe Phe Gly Ala Phe Leu Ile Asn
165 170

<210> 18
<211> 143
<212> PRT
<213> Homo sapiens

<400> 18

Arg Ala Pro Phe Lys Lys Ser Trp Ala Tyr Leu Gln Val Ala Lys His
1 5 10 15

Leu Asn Lys Thr Lys Leu Ser Trp Asn Lys Asp Gly Ile Leu His Gly
20 25 30

Val Arg Tyr Gln Asp Gly Asn Leu Val Ile Gln Phe Pro Gly Leu Tyr
35 40 45

Phe Ile Ile Cys Gln Leu Gln Phe Leu Val Gln Cys Pro Asn Asn Ser
50 55 60

Val Asp Leu Lys Leu Glu Leu Leu Ile Asn Lys His Ile Lys Lys Gln
65 70 75 80

Ala Leu Val Thr Val Cys Glu Ser Gly Met Gln Thr Lys His Val Tyr
85 90 95

Gln Asn Leu Ser Gln Phe Leu Leu Asp Tyr Leu Gln Val Asn Thr Thr
100 105 110

Ile Ser Val Asn Val Asp Thr Phe Gln Tyr Ile Asp Thr Ser Thr Phe
115 120 125

Pro Leu Glu Asn Val Leu Ser Ile Phe Leu Tyr Ser Asn Ser Asp
130 135 140

<210> 19
<211> 143
<212> PRT

<213> Mus musculus

<400> 19

Ser Thr Pro Ser Lys Lys Ser Trp Ala Tyr Leu Gln Val Ser Lys His
1 5 10 15

Leu Asn Asn Thr Lys Leu Ser Trp Asn Glu Asp Gly Thr Ile His Gly
20 25 30

Leu Ile Tyr Gln Asp Gly Asn Leu Ile Val Gln Phe Pro Gly Leu Tyr
35 40 45

Phe Ile Val Cys Gln Leu Gln Phe Leu Val Gln Cys Ser Asn His Ser
50 55 60

Val Asp Leu Thr Leu Gln Leu Leu Ile Asn Ser Lys Ile Lys Lys Gln
65 70 75 80

Thr Leu Val Thr Val Cys Glu Ser Gly Val Gln Ser Lys Asn Ile Tyr
85 90 95

Gln Asn Leu Ser Gln Phe Leu Leu His Tyr Leu Gln Val Asn Ser Thr
100 105 110

Ile Ser Val Arg Val Asp Asn Phe Gln Tyr Val Asp Thr Asn Thr Phe
115 120 125

Pro Leu Asp Asn Val Leu Ser Val Phe Leu Tyr Ser Ser Ser Asp
130 135 140

<210> 20

<211> 163

<212> PRT

<213> Homo sapiens

<400> 20

Asp Leu Ser Pro Gly Leu Pro Ala Ala His Leu Ile Gly Ala Pro Leu
1 5 10 15

Lys Gly Gln Gly Leu Gly Trp Glu Thr Thr Lys Glu Gln Ala Phe Leu
20 25 30

Thr Ser Gly Thr Gln Phe Ser Asp Ala Glu Gly Leu Ala Leu Pro Gln
35 40 45

Asp Gly Leu Tyr Tyr Leu Tyr Cys Leu Val Gly Tyr Arg Gly Arg Ala
50 55 60

Pro Pro Gly Gly Gly Asp Pro Gln Gly Arg Ser Val Thr Leu Arg Ser
65 70 75 80

Ser Leu Tyr Arg Ala Gly Gly Ala Tyr Gly Pro Gly Thr Pro Glu Leu
85 90 95

Leu Leu Glu Gly Ala Glu Thr Val Thr Pro Val Leu Asp Pro Ala Arg
100 105 110

Arg Gln Gly Tyr Gly Pro Leu Trp Tyr Thr Ser Val Gly Phe Gly Gly
115 120 125

Leu Val Gln Leu Arg Arg Gly Glu Arg Val Tyr Val Asn Ile Ser His
130 135 140

Pro Asp Met Val Asp Phe Ala Arg Gly Lys Thr Phe Phe Gly Ala Val
145 150 155 160

Met Val Gly

<210> 21
<211> 159
<212> PRT
<213> Mus musculus

<400> 21

Asp Leu Asn Pro Glu Leu Pro Ala Ala His Leu Ile Gly Ala Trp Met
1 5 10 15

Ser Gly Gln Gly Leu Ser Trp Glu Ala Ser Gln Glu Glu Ala Phe Leu
20 25 30

Arg Ser Gly Ala Gln Phe Ser Pro Thr His Gly Leu Ala Leu Pro Gln
35 40 45

Asp Gly Val Tyr Tyr Leu Tyr Cys His Val Gly Tyr Arg Gly Arg Thr
50 55 60

Pro Pro Ala Gly Arg Ser Arg Ala Arg Ser Leu Thr Leu Arg Ser Ala
65 70 75 80

Leu Tyr Arg Ala Gly Gly Ala Tyr Gly Arg Gly Ser Pro Glu Leu Leu
85 90 95

Leu Glu Gly Ala Glu Thr Val Thr Pro Val Val Asp Pro Ile Gly Tyr
100 105 110

Gly Ser Leu Trp Tyr Thr Ser Val Gly Phe Gly Gly Leu Ala Gln Leu
 115 120 125

Arg Ser Gly Glu Arg Val Tyr Val Asn Ile Ser His Pro Asp Met Val
 130 135 140

Asp Tyr Arg Arg Gly Lys Thr Phe Phe Gly Ala Val Met Val Gly
 145 150 155

<210> 22
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 22

Ala His Ser Thr Leu Lys Pro Ala Ala His Leu Ile Gly Asp Pro Ser
 1 5 10 15

Lys Gln Asn Ser Leu Leu Trp Arg Ala Asn Thr Asp Arg Ala Phe Leu
 20 25 30

Gln Asp Gly Phe Ser Leu Ser Asn Asn Ser Leu Leu Val Pro Thr Ser
 35 40 45

Gly Ile Tyr Phe Val Tyr Ser Gln Val Val Phe Ser Gly Lys Ala Tyr
 50 55 60

Ser Pro Lys Ala Thr Ser Ser Pro Leu Tyr Leu Ala His Glu Val Gln
 65 70 75 80

Leu Phe Ser Ser Gln Tyr Pro Phe His Val Pro Leu Leu Ser Ser Gln
 85 90 95

Lys Met Val Tyr Pro Gly Leu Gln Glu Pro Trp Leu His Ser Met Tyr
 100 105 110

His Gly Ala Ala Phe Gln Leu Thr Gln Gly Asp Gln Leu Ser Thr His
 115 120 125

Thr Asp Gly Ile Pro His Leu Val Leu Ser Pro Ser Thr Val Phe Phe
 130 135 140

Gly Ala Phe Ala Leu
 145

<210> 23
 <211> 149
 <212> PRT
 <213> Mus musculus

<400> 23

Thr His Gly Ile Leu Lys Pro Ala Ala His Leu Val Gly Tyr Pro Ser
1 5 10 15

Lys Gln Asn Ser Leu Leu Trp Arg Ala Ser Thr Asp Arg Ala Phe Leu
20 25 30

Arg His Gly Phe Ser Leu Ser Asn Asn Ser Leu Leu Ile Pro Thr Ser
35 40 45

Gly Leu Tyr Phe Val Tyr Ser Gln Val Val Phe Ser Gly Glu Ser Cys
50 55 60

Ser Pro Arg Ala Ile Pro Thr Pro Ile Tyr Leu Ala His Glu Val Gln
65 70 75 80

Leu Phe Ser Ser Gln Tyr Pro Phe His Val Pro Leu Leu Ser Ala Gln
85 90 95

Q9

Lys Ser Val Tyr Pro Gly Leu Gln Gly Pro Trp Val Arg Ser Met Tyr
100 105 110

Gln Gly Ala Val Phe Leu Leu Ser Lys Gly Asp Gln Leu Ser Thr His
115 120 125

Thr Asp Gly Ile Ser His Leu His Phe Ser Pro Ser Ser Val Phe Phe
130 135 140

Gly Ala Phe Ala Leu
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<210> 24

<211> 152

<212> PRT

<213> Homo sapiens

<400> 24

Arg Thr Pro Ser Asp Lys Pro Val Ala His Val Val Ala Asn Pro Gln
1 5 10 15

Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu Leu
20 25 30

Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu Val Val Pro Ser Glu
35 40 45

Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys
Page 21

50

55

60

Pro Ser Thr His Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val
65 70 75 80

Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala Ile Lys Ser Pro Cys
85 90 95

Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu Pro
100 105 110

Ile Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser
115 120 125

Ala Glu Ile Asn Arg Pro Asp Tyr Leu Asp Phe Ala Glu Ser Gly Gln
130 135 140

Val Tyr Phe Gly Ile Ile Ala Leu
145 150

<210> 25
<211> 29
<212> PRT
<213> Artificial

<220>
<223> AGP-3 RELATED PROTEIN

<220>
<221> misc_feature
<222> (11, 16)..(19)
<223> X = any naturally occurring amino acid sequence

<400> 25

Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Xaa Thr Pro Thr Ile Xaa
1 5 10 15

Lys Gly Xaa Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe
20 25

<210> 26
<211> 25
<212> PRT
<213> Artificial

<220>
<223> CONSENSUS

<220>
<221> misc_feature
<222> (5)..(5)
<223> X = any naturally occurring amino acid sequence

<400> 26

Ala Met Gly His Xaa Ile Gln Arg Lys Lys Val His Val Phe Gly Asp
1 5 10 15

Glu Leu Ser Leu Val Thr Leu Phe Arg
20 25

<210> 27

<211> 142

<212> PRT

<213> Artificial

<220>

<223> CONSENSUS

<220>

<221> misc_feature

<222> (11, 16, 19, 33, 43, 45, 46, 54, 61, 63, 68, 95, 109, 116, 129, 130)..(133)

<223> X = any naturally occurring amino acid sequence

<400> 27

Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Xaa Thr Pro Thr Ile Xaa
1 5 10 15

Lys Gly Xaa Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly
20 25 30

Xaa Ala Leu Glu Glu Lys Glu Asn Lys Ile Xaa Val Xaa Xaa Thr Gly
35 40 45

Tyr Phe Phe Ile Tyr Xaa Gln Val Leu Tyr Thr Asp Xaa Xaa Xaa Ala
50 55 60

Met Gly His Xaa Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu
65 70 75 80

Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Xaa Thr
85 90 95

Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Xaa Leu Glu Glu
100 105 110

Gly Asp Glu Xaa Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser
115 120 125

Xaa Xaa Gly Asp Xaa Thr Phe Phe Gly Ala Leu Lys Leu Leu
130 135 140

<210> 28
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 <212> DNA
 <213> Mus musculus

 <400> 28
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 <210> 29
 <211> 33
 <212> DNA
 <213> Mus musculus

 <400> 29
 tctccctcga gatcacgcac tccagcaagt gag 33

 <210> 30
 <211> 24
 <212> DNA
 <213> Mus musculus

 <400> 30
 aacaggctat ttcttcatct acag 24

 <210> 31
 <211> 25
 <212> DNA
 <213> Mus musculus

 <400> 31
 ctcacatg tatcttatca tgtct 25

 <210> 32
 <211> 25
 <212> DNA
 <213> Mus musculus

 <400> 32
 ctcacatg tatcttatca tgtct 25

 <210> 33
 <211> 20
 <212> DNA
 <213> Mus musculus

 <400> 33
 agccgcggcc acaggaacag 20

 <210> 34
 <211> 19
 <212> DNA
 <213> Mus musculus

 <400> 34
 tggatgacat gacccatag 19

<210> 35
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 35

Met Asn Ser Arg Asn Lys Arg
 1 5

<210> 36
 <211> 60
 <212> DNA
 <213> Homo sapiens

<400> 36
 atttgattct agaaggagga ataacatatg aacagccgta ataagcgtgc cgttcagggt 60

<210> 37
 <211> 45
 <212> DNA
 <213> Homo sapiens

<400> 37
 ccgcggatcc tcgagttaca gcagtttcaa tgcaccaaaa aatgt 45

<210> 38
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 38

Met Asp Tyr Lys Asp Asp Asp Asp Lys Lys Leu Asn Ser Arg Asn Lys
 1 5 10 15

Arg

<210> 39
 <211> 48
 <212> DNA
 <213> Homo sapiens

<400> 39
 gacgatgaca agaagcttaa cagccgtaat aagcgtgccg ttcagggt 48

<210> 40
 <211> 151
 <212> PRT
 <213> Mus musculus

<400> 40

Gln Asn Ser Ser Asp Lys Pro Val Ala His Val Val Ala Asn His Gln
 1 5 10 15

Val Glu Glu Gln Leu Glu Trp Leu Ser Gln Arg Ala Asn Ala Leu Leu
20 25 30

Ala Asn Gly Met Asp Leu Lys Asp Asn Gln Leu Val Val Pro Ala Asp
35 40 45

Gly Leu Tyr Leu Val Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys
50 55 60

Pro Asp Tyr Val Leu Leu Thr His Thr Val Ser Arg Phe Ala Ile Ser
65 70 75 80

Tyr Gln Glu Lys Val Asn Leu Leu Ser Ala Val Lys Ser Pro Cys Pro
85 90 95

Lys Asp Thr Pro Glu Gly Ala Glu Leu Lys Pro Trp Tyr Glu Pro Ile
100 105 110

29 Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Gln Leu Ser Ala
115 120 125

Glu Val Asn Leu Pro Lys Tyr Leu Asp Phe Ala Glu Ser Gly Gln Val
130 135 140

Tyr Phe Gly Val Ile Ala Leu
145 150

<210> 41
<211> 1340
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (28)..(906)
<223>

<400> 41
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Met Ser Gly Leu Gly Arg Ser Arg Arg
1 5

ggt ggc cgg agc cgt gtg gac cag gag gag cgc ttt cca cag ggc ctg 102
Gly Gly Arg Ser Arg Val Asp Gln Glu Glu Arg Phe Pro Gln Gly Leu
10 15 20 25

tgg aca ggg gtg gct atg aga tcc tgc ccc gaa gag cag tac tgg gat 150
Trp Thr Gly Val Ala Met Arg Ser Cys Pro Glu Glu Gln Tyr Trp Asp
30 35 40

cct ctg ctg ggt acc tgc atg tcc tgc aaa acc att tgc aac cat cag 198
Pro Leu Leu Gly Thr Cys Met Ser Cys Lys Thr Ile Cys Asn His Gln
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45

50

55

agc Ser	cag Gln	cgc Arg 60	acc Thr	tgt Cys	gca Ala	gcc Ala	ttc Phe 65	tgc Cys	agg Arg	tca Ser	ctc Leu	agc Ser 70	tgc Cys	cgc Arg	aag Lys	246
gag Glu	caa Gln 75	ggc Gly	aag Lys	ttc Phe	tat Tyr	gac Asp 80	cat His	ctc Leu	ctg Leu	agg Arg	gac Asp 85	tgc Cys	atc Ile	agc Ser	tgt Cys	294
gcc Ala 90	tcc Ser	atc Ile	tgt Cys	gga Gly	cag Gln 95	cac His	cct Pro	aag Lys	caa Gln	tgt Cys 100	gca Ala	tac Tyr	ttc Phe	tgt Cys	gag Glu 105	342
aac Asn	aag Lys	ctc Leu	agg Arg	agc Ser 110	cca Pro	gtg Val	aac Asn	ctt Leu	cca Pro 115	cca Pro	gag Glu	ctc Leu	agg Arg	aga Arg 120	cag Gln	390
cgg Arg	agt Ser	gga Gly	gaa Glu 125	gtt Val	gaa Glu	aac Asn	aat Asn	tca Ser 130	gac Asp	aac Asn	tcg Ser	gga Gly 135	agg Arg	tac Tyr	caa Gln	438
gga Gly	ctg Leu	gag Glu 140	cac His	aga Arg	ggc Gly	tca Ser	gaa Glu 145	gca Ala	agt Ser	cca Pro	gct Ala	ctc Leu 150	ccg Pro	ggg Gly	ctg Leu	486
aag Lys	ctg Leu 155	agt Ser	gca Ala	gat Asp	cag Gln	gtg Val 160	gcc Ala	ctg Leu	gtc Val	tac Tyr	agc Ser 165	acg Thr	ctg Leu	ggg Gly	ctc Leu	534
tgc Cys 170	ctg Leu	tgt Cys	gcc Ala	gtc Val	ctc Leu 175	tgc Cys	tgc Cys	ttc Phe	ctg Leu	gtg Val 180	gcg Ala	gtg Val	gcc Ala	tgc Cys	ttc Phe 185	582
ctc Leu	aag Lys	atg Met	agg Arg	ggg Gly 190	gat Asp	ccc Pro	tgc Cys	tcc Ser	tgc Cys 195	cag Gln	ccc Pro	cgc Arg	tca Ser	agg Arg 200	ccc Pro	630
cgt Arg	caa Gln	agt Ser	ccg Pro 205	gcc Ala	aag Lys	tct Ser	tcc Ser	cag Gln 210	gat Asp	cac His	gcg Ala	atg Met	gaa Glu 215	gcc Ala	ggc Gly	678
agc Ser	cct Pro	gtg Val 220	agc Ser	aca Thr	tcc Ser	ccc Pro	gag Glu 225	cca Pro	gtg Val	gag Glu	acc Thr	tgc Cys 230	agc Ser	ttc Phe	tgc Cys	726
ttc Phe	cct Pro 235	gag Glu	tgc Cys	agg Arg	gcg Ala	ccc Pro 240	acg Thr	cag Gln	gag Glu	agc Ser	gca Ala 245	gtc Val	acg Thr	cct Pro	ggg Gly	774
acc Thr 250	ccc Pro	gac Asp	ccc Pro	act Thr	tgt Cys 255	gct Ala	gga Gly	agg Arg	tgg Trp	ggg Gly 260	tgc Cys	cac His	acc Thr	agg Arg	acc Thr 265	822
aca Thr	gtc Val	ctg Leu	cag Gln	cct Pro 270	tgc Cys	cca Pro	cac His	atc Ile	cca Pro 275	gac Asp	agc Ser	ggc Gly	ctt Leu	ggc Gly 280	att Ile	870
gtg Val	tgt Cys	gtg Val	cct Pro 285	gcc Ala	cag Gln	gag Glu	ggg Gly	ggc Gly 290	cca Pro	ggt Gly	gca Ala	taa	atg	ggg	ggg	916
tcagggaggg	aaaggaggag	ggagagagat	ggagaggagg	ggagagagaa	agagaggtgg											976

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ggagagggga gagagatatg aggagagaga gacagaggag gcagagaggg agagaaacag 1036
aggagacaga gaggagaga gagacagagg gagagagaga cagagaggaa gagaggcaga 1096
gagggaaaga ggcagagaag gaaagagaca ggcagagaag gagagaggca gagagggaga 1156
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gcaggaggtc ggggcactct gagtcccagt tcccagtgc gctgtaggtc gtcacacct 1276
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ctgg 1340

<210> 42
<211> 293
<212> PRT
<213> Homo sapiens
<400> 42

Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp
1 5 10 15

Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg
20 25 30

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met
35 40 45

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala
50 55 60

Phe Cys Arg Ser Leu Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp
65 70 75 80

His Leu Leu Arg Asp Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His
85 90 95

Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu Arg Ser Pro Val
100 105 110

Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser Gly Glu Val Glu Asn
115 120 125

Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu Glu His Arg Gly Ser
130 135 140

Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu Ser Ala Asp Gln Val
145 150 155 160

Ala Leu Val Tyr Ser Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys
 165 170 175

Cys Phe Leu Val Ala Val Ala Cys Phe Leu Lys Met Arg Gly Asp Pro
 180 185 190

Cys Ser Cys Gln Pro Arg Ser Arg Pro Arg Gln Ser Pro Ala Lys Ser
 195 200 205

Ser Gln Asp His Ala Met Glu Ala Gly Ser Pro Val Ser Thr Ser Pro
 210 215 220

Glu Pro Val Glu Thr Cys Ser Phe Cys Phe Pro Glu Cys Arg Ala Pro
 225 230 235 240

Thr Gln Glu Ser Ala Val Thr Pro Gly Thr Pro Asp Pro Thr Cys Ala
 245 250 255

Gly Arg Trp Gly Cys His Thr Arg Thr Thr Val Leu Gln Pro Cys Pro
 260 265 270

His Ile Pro Asp Ser Gly Leu Gly Ile Val Cys Val Pro Ala Gln Glu
 275 280 285

Gly Gly Pro Gly Ala
 290

<210> 43
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 43

Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp
 1 5 10 15

Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg
 20 25 30

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met
 35 40 45

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala
 50 55 60

Phe Cys Arg Ser Leu Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp
 65 70 75 80

His Leu Leu Arg Asp Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His
85 90 95

Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu Arg Ser Pro Val
100 105 110

Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser Gly Glu Val Glu Asn
115 120 125

Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu Glu His Arg Gly Ser
130 135 140

Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu Ser Ala Asp Gln Val
145 150 155 160

Ala Leu Val Tyr Ser
165

<210> 44
<211> 32
<212> PRT
<213> Homo sapiens

<400> 44

Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp
1 5 10 15

Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg
20 25 30

<210> 45
<211> 37
<212> PRT
<213> Homo sapiens

<400> 45

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met
1 5 10 15

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala
20 25 30

Phe Cys Arg Ser Leu
35

<210> 46
<211> 38
<212> PRT
<213> Homo sapiens

<400> 46

Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp His Leu Leu Arg Asp
1 5 10 15

Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His Pro Lys Gln Cys Ala
20 25 30

Tyr Phe Cys Glu Asn Lys
35

<210> 47

<211> 57

<212> PRT

<213> Homo sapiens

<400> 47

Leu Arg Ser Pro Val Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser
1 5 10 15

Q9

Gly Glu Val Glu Asn Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu
20 25 30

Glu His Arg Gly Ser Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu
35 40 45

Ser Ala Asp Gln Val Ala Val Tyr Ser
50 55

<210> 48

<211> 21

<212> PRT

<213> Homo sapiens

<400> 48

Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys Cys Phe Leu Val Ala
1 5 10 15

Val Ala Cys Phe Leu
20

<210> 49

<211> 106

<212> PRT

<213> Homo sapiens

<400> 49

Lys Met Arg Gly Asp Pro Cys Ser Cys Gln Pro Arg Ser Arg Pro Arg
1 5 10 15

Gln Ser Pro Ala Lys Ser Ser Gln Asp His Ala Met Glu Ala Gly Ser
20 25 30

Pro Val Ser Thr Ser Pro Glu Pro Val Glu Thr Cys Ser Phe Cys Phe
35 40 45

Pro Glu Cys Arg Ala Pro Thr Gln Glu Ser Ala Val Thr Pro Gly Thr
50 55 60

Pro Asp Thr Cys Ala Gly Arg Trp Gly Cys His Thr Arg Thr Thr Val
65 70 75 80

Leu Gln Pro Cys Pro His Ile Pro Asp Ser Gly Leu Gly Ile Val Cys
85 90 95

Gly Pro Ala Gln Glu Gly Gly Pro Gly Ala
100 105

AG

<210> 50
<211> 32
<212> DNA
<213> Homo sapiens

<400> 50
tctccaagct tccgatcctg agtaatgagt gg

32

<210> 51
<211> 34
<212> DNA
<213> Homo sapiens

<400> 51
tctccgcggc cgcgctgtag accagggcca cctg

34

<210> 52
<211> 6
<212> PRT
<213> Homo sapiens

<400> 52

Gly Ala Leu Lys Leu Leu
1 5